

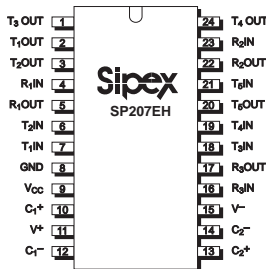


SP207EH–SP213EH

High Speed +5V High Performance RS232 Transceivers

features

- Single +5V Supply Operation
- 0.1µF External Charge Pump Capacitors
- 500kbps Data Rate under Load
- Standard SOIC and SSOP Packages
- Lower Supply Current than Competition (typical 3mA)
- 1µA Shutdown Mode
- WakeUp Feature in Shutdown Mode
- Tri-State Receiver Outputs
- Ideal for High Speed RS-232 Applications
- Improved ESD Specifications:
 - ±15kV Human Body Model
 - ±15kV IEC1000-4-2 Air Discharge
 - ±8kV IEC1000-4-2 Contact Discharge



description

The SP207EH/208EH/211EH/213EH devices are high speed, enhanced multi-channel RS-232 line transceivers with improved electrical performance. The SP207EH/208EH/211EH/213EH series is a superior drop-in replacement to our previous versions as well as popular industry standards. All devices feature low-power CMOS construction and the Sipex-patented (5,306,954) on-board charge pump circuitry that generates the +10V RS-232 voltage levels using 0.1µF charge pump capacitors. The SP211E and SP213E devices feature a low-power shutdown mode, which reduces power supply drain to 1mA. Enhancements to this series include a higher transmission rate of 500kbps, a lower power supply current at 3mA typical (no load), and superior ESD performance. The ESD tolerance has been improved for this series to over ±15kV for both Human Body Model and IEC1000-4-2 Air Discharge test methods.

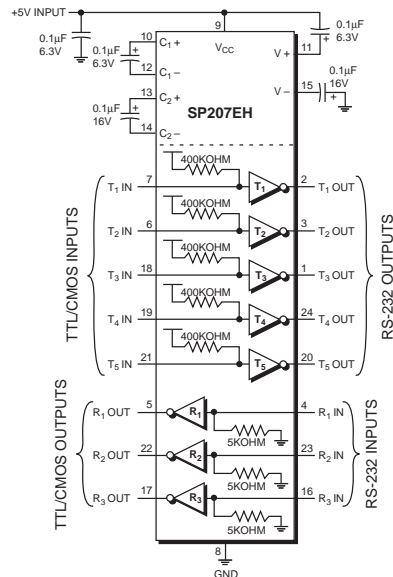
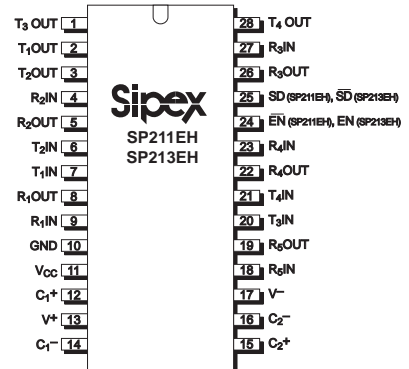
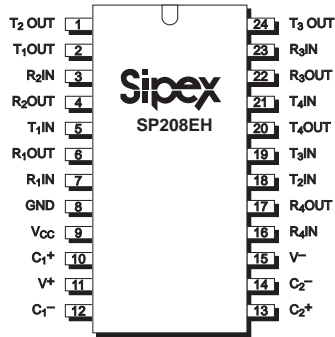
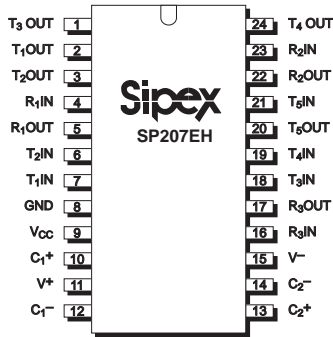


table 1. part selection table

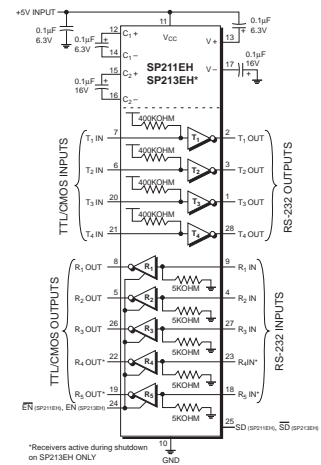
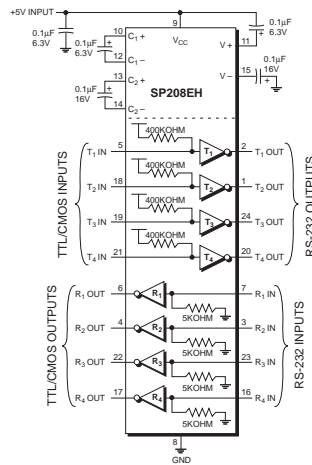
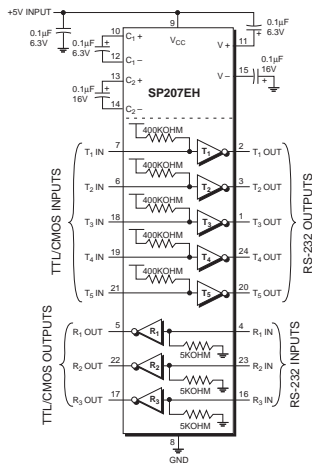
| Part No. | RS-232 Drivers | RS-232 Receivers | Receivers Active in Shutdown | External 0.1µF Capacitors | Shutdown | WakeUp | TTL Tri-State |
|----------|----------------|------------------|------------------------------|---------------------------|----------|--------|---------------|
| SP207EH | 5 | 3 | 0 | 4 | No | No | No |
| SP208EH | 4 | 4 | 0 | 4 | No | No | No |
| SP211EH | 4 | 5 | 0 | 4 | Yes | No | Yes |
| SP213EH | 4 | 5 | 2 | 4 | Yes | Yes | Yes |

SP207EH - SP213EH

pin configuration



typical application circuit



ordering information - Please consult the factory for pricing and availability on a Tape-On-Reel option.

| Temperature Range | | Package Type |
|-------------------------------------|-------------------------------------|--|
| 0°C to +70°C | -40°C to +85°C | |
| SP207EHCA SP207EHCP SP207EHCT | SP207EHEA SP207EHEP SP207EHET | 24-pin SSOP 24-pin Plastic DIP 24-pin SOIC |
| SP208EHCA SP208EHCP SP208EHCT | SP208EHEA SP208EHEP SP208EHET | 24-pin SSOP 24-pin Plastic DIP 24-pin SOIC |
| SP211EHCA SP211EHCT | SP211EHEA SP211EHET | 28-pin SSOP 28-pin SOIC |
| SP213EHCA SP213EHCT | SP213EHEA SP213EHET | 28-pin SSOP 28-pin SOIC |